

The term primary prevention refers to public health strategies to prevent or reduce the occurrence of disease (e.g., cancer incidence) among individuals who are susceptible to developing the disease. Examples of primary prevention in cancer control are the prevention and cessation of tobacco use, dietary changes, physical activity, and the prevention of exposure to ultraviolet radiation.

The next four chapters cover the primary prevention of cancer. Chapters included in this section address tobacco-use prevention, cessation, and lung cancer; diet and physical activity; ultraviolet radiation and skin cancer; and other environmental issues.

Tobacco use causes many forms of cancer, chief among them lung cancer which constitutes almost one-third of all cancers diagnosed in Maryland.² There is an emerging body of evidence showing that a healthy diet and physical activity may reduce the risk of developing certain types of cancer. Ultraviolet radiation is the major cause of skin cancer, and approximately 10% of all cancer deaths are estimated to be attributed to occupational and environmental exposures to carcinogens.^{3,4}

Each chapter in this section describes the scope of the cancer problem caused by the various risk factors, the prevalence of the risk factors (e.g., tobacco-use) or the primary prevention behaviors (e.g., healthy diet, physical activity, sun protection) in Maryland, what is known about primary prevention in each area, and current efforts in Maryland. In addition, each chapter discusses gaps and barriers and recommends goals, objectives, and strategies to reduce the burden of cancer in Maryland.

¹ Brownson R, Remington R, Davis J, editors. Chronic disease epidemiology and control. American Public Health Association; 1998.

² Maryland Department of Health & Mental Hygiene, Maryland Cancer Registry. 2000.

³ Doll R, Peto R. The causes of cancer: quantitative estimates of avoidable risks of cancer in the United States today. New York, NY: Oxford University Press. Inc.; 1981.

⁴ Harvard Center for Cancer Prevention. The Harvard Report on Cancer Prevention. Cancer Causes Control. 1996; (Accessed at http://www.hsph.harvard.edu/cancer/publications/reports.html.)